

ABSTRACT OF THE DISCLOSURE

A light emitting unit emits a light in a light emitting direction, which is the direction to an object, the light having a distributed pattern in a predetermined direction. A photographing device obtains an
5 image of the object along with a photographing direction. A holding mechanism holds the light emitting unit and the photographing apparatus in such a relation that (a) the photographing direction is not in a plane that includes both the light emitting direction and the predetermined direction of the distributed pattern, and (b) the
10 photographing direction is not parallel to the light emitting direction. A distance deriving unit derives a distance between the object and a predetermined position based on the image obtained by the photographing device.